

# U.S. DEPARTMENT OF ENERGY OFFICE OF FOSSIL ENERGY MICKEY LELAND ENERGY FELLOWSHIP



#### A TRIBUTE

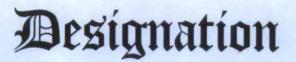
The Department of Energy's (DOE's) Office of Fossil Energy's (FE's) Energy Fellowship Program is dedicated to Mickey Leland, the late U.S. Congressman from Texas and spokesperson for impoverished people in the United States and throughout the world.

Mickey Leland served six terms in the U.S. Congress and five years as a Texas state legislator and Democratic Party official. During his Congressional career, Leland was chosen to be Freshman Majority Whip in his first term and later served twice as At-Large Majority Whip. Leland was also Chairman of the Congressional Black Caucus for the Ninety-ninth Congress.

As Mickey Leland visited soup kitchens and makeshift shelters, he became increasingly concerned about hungry and homeless people. The work for which he is best remembered began when Leland co-authored legislation with Rep. Ben Gilman (R-NY) to establish the House Select Committee on Hunger. House Speaker Thomas P. "Tip" O'Neil named Leland chairman when it was enacted in 1984. The Select Committee's mandate was to "conduct a continuing, comprehensive study and review of the problems of hunger and malnutrition."

On August 7, 1989, a plane carrying Leland, Congressional staff members, State Department officials, and Ethiopian nationals to a United Nations refugee camp in Ethiopia crashed in a mountainous region. There were no survivors.

Mickey Leland's advocacy, action and commitment to help people continues today through a variety of initiatives including the Mickey Leland Energy Fellowship, sponsored by DOE's Office of Fossil Energy. This fellowship program is dedicated to supporting minority students who are studying in academic disciplines that are related to FE's mission. The fellowship affords students the opportunity to enhance their knowledge and gain hands-on experience. It also encourages students to consider future employment with the Federal government upon graduation. Mickey Leland's example of public service serves as an inspiration to fellowship recipients.







#### MICKEY LELAND ENERGY FELLOWSHIP

(Formerly the Fossil Energy Minority Education Initiative)

Not so many years ago I had the privilege to work in the United States Congress with a great public servant, the late Congressman Mickey Leland. His humanity and compassion envisioned a world in which every human being had basic necessities like food, water, clean air, energy and an opportunity to develop to their full potential.

He represented the people of a congressional district in Houston, Texas, a city that some say is the energy capital of the world. Mickey strongly believed that no human potential should go undeveloped due to exclusion or lack of basic human needs. He was passionate about the power of inclusion to solve national and global problems. I think he would have been a champion for energy as a tool for development.

Since 1995 the coal, petroleum, and natural gas programs under the Fossil Energy Minority Education Initiative have targeted minority students in Geology, Engineering, Math, and the Sciences. Students are introduced to 10 weeks of mentoring, leadership training and work experience with energy industry partners and government scientists. The initiative has introduced African Americans, Hispanic Americans, and Native Americans to an industry not known for its diversity.

I think Mickey would be pleased to know that the students selected for this program are exposed to the energy industry and government scientists whose mission is to make coal, oil, and natural gas, cleaner and more sustainable in the U.S. and the world.

So, it is fitting to rename this outstanding public service initiative for this great American whose life ended August of 1989 -- in a plane crash -- trying to expand the human potential of people devastated by famine and poverty.

Therefore, on this day, August 8, 2000, I hereby designate the Fossil Energy Minority Education Initiative to be renamed the Mickey Leland Energy Fellowship.

Bill Richardson Secretary of Energy



#### Department of Energy

Washington, DC 20585 July 13, 2000

#### Dear Colleague:

The Department of Energy is aware that in order to meet future employment demands of the fossil fuels industry, it is important to attract students to the science, math, and engineering curriculums. The Office of Fossil Energy's Minority Education Initiative (MEI) helps address this need.

The Office of Fossil Energy is dedicated to supporting students who are studying in academic disciplines that are related to its mission. Through Fossil Energy Headquarters and field offices, summer internship opportunities are offered to students to enhance their knowledge and gain hands-on experience and encourage them to consider future employment with the Federal Government upon graduation. The MEI consists of three internship programs: Historically Black Colleges and Universities (HBCU) Internship Program, the Hispanic Internship Program (HIP), and the Tribal Colleges and Universities (TCU) Internship Program. All three programs value the common goal of advancing the development of human potential, strengthening the capability of minority institutions to provide quality education, and increasing opportunities for students to participate in and benefit from the Federal programs.

The Office of Fossil Energy is proud of its accomplishments in the area of diversity, especially the opportunities this Initiative provides for minority students. It is a role model for other organizations in the Department, and I am pleased that the MEI is being honored by being named an Energy Fellowship after a man who devoted his life to improving the lives of others – Mickey Leland.

Sincerely,

Robert W. Gee Assistant Secretary

for Fossil Energy

# MICKEY LELAND ENERGY FELLOWSHIP

The Office of Fossil Energy (FE) continues to be dedicated to supporting minority students who are studying in academic disciplines that are related to FE's mission. Through its Headquarters and field offices, FE offers summer internship opportunities to students to enhance their knowledge and gain hands-on experience and encourages them to consider future employment with the Federal Government upon graduation. This fellowship embodies three programs - Historically Black Colleges and Universities (HBCU), Hispanic, and Tribal Colleges and Universities. In addition, the fellowship addresses participation by disabled students.

The Mickey Leland Energy Fellowship (MLEF) will be beneficial to all involved. It offers a promise of a winwin situation to stakeholders and is potentially beneficial to all participants. For interns, it provides a professional experience and opportunities for personal growth, making them more marketable upon graduation. It offers an economic incentive to pave the way for hiring and bringing a diverse workforce into a corporate setting, thereby making the industry eligible to qualify for potential business opportunities with the Federal Government.

#### MISSION

To support the Executive Orders for Historically Black Colleges and Universities, Hispanic Serving Institutions, and Tribal Colleges and Universities by providing opportunities for educational enhancement and career development through internships that target minority students in science, math, and engineering curriculums.

### VISION: 2005

The Department of Energy's Office of Fossil Energy will be recognized as a model in providing educational and career opportunities for minority students.

# CRITERIA

- The initiative targets participation from HBCUs, Hsis, and TCUs.
- Participation is open to undergraduate and first year graduate students.
- The minimum grade point average requirement is 2.8 (out of 4.0).
- Applicants must be a U.S. citizen.

### GOALS

#### **FE** will strive to:

- Develop and facilitate internship opportunities for HBCU, Hsis, and TCU students at DOE/FE sites, industry, and national laboratories
- · Enhance student marketability upon graduation
- Create a win-win process by which students can experience and contribute to the organization's workforce by performing significant tasks
- Promote opportunities for disabled students to participate
- Develop highly-skilled graduates who may choose to pursue careers within DOE and other government agencies; and
- Increase opportunities for HBCUs, Hsis, and TCUs to participate and benefit from Federal programs

# HISTORICALLY BLACK COLLEGES AND UNIVERSITIES INTERNSHIP PROGRAM

The U.S. Department of Energy (DOE) Headquarters FE Historically Black Colleges and Universities (HBCU) Internship Program was established in 1995 to support Executive Order 12876. The HBCU component of DOE's FE Mickey Leland Energy Fellowship began as a two-year pilot program with initial placement sites at oil and gas programs in FE. It was established to advance the development of human potential, strengthen the capability of HBCUs to provide quality education, and increase opportunities to participate in and benefit from Federal programs. At the inception of the program, the focus was on geology and engineering disciplines. Since that time, the program has expanded to include other academic disciplines that are integral to the petroleum and coal industries.

The program began with six students in 1995. Since then, seventy-one students have participated in the program. On April 6, 1997, the Assistant Secretary for FE fully institutionalized the program within FE. In 1998, an industry partnership initiative was incorporated into the program that allowed placement of students at energy industry sites on a 50/50 cost-share basis between government and industry. Four students were placed at three locations. Students are brought on board for the summer as Associated Western Universities (AWU) fellows, not as Federal employees. AWU administers the program under the direction of the DOE program coordinators.





"I am very proud of my son and hope that this experience is one that will last him a lifetime."

A Parent

#### **HISTORY**

HBCUs are postsecondary academic institutions founded before 1964 whose educational mission has historically been the education of Black Americans. Located primarily in the Southeastern United States, currently there are about 118 HBCUs; a mix of community, junior colleges, and four-year colleges and universities, of which 62 are private and 56 are state supported.

HBCUs enroll less than 20% of African American undergraduates, but award one third of all bachelor degrees and a significant number of the advanced degrees earned by African Americans.

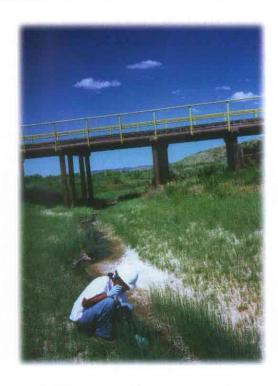
"I support this effort. It allows industry, the government, and educational institutions to work simultaneously to provide students with the best kind of education. Students can take what they have learned in the classroom and apply it in the workforce. It allows government and the private sector to work as partners in helping to mold future Americans in the workforce."

Dr. Isaac J. Crumbly Director and Founder Cooperative Developmental Energy Program (CDEP) Fort Valley State University

# HBCUs that have participated in the MLEF Program to date:

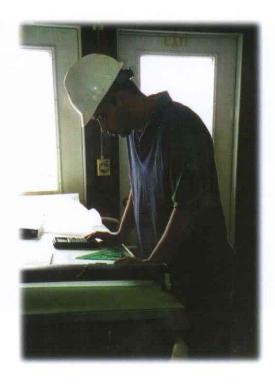
Elizabeth City State University (NC) Fort Valley State University (GA) Florida A&M University (FL) Southern University (LA) Xavier University (LA)

Dillard University (LA)
Langston University (OK)
Prairie View A&M University (TX)
Bowie State University (MD)
Alcorn State University (MS)



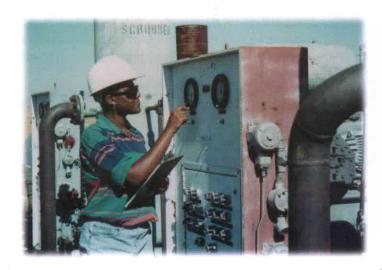
"DOE's HBCU Internship program is an excellent program and has helped our students at Elizabeth City State University tremendously in furthering their careers in science and technology."

Dr. R.P. Sinha Professor/Chair Department of Geosciences Elizabeth City State University



"I was able to go to a totally different environment and interact with people from all over the country. The experience is something I will cherish for the rest of my life."

> Khaaliq Salim Class of 1999





# HISPANIC INTERNSHIP PROGRAM

The FE Hispanic Internship Program (HIP) is an element of FE's Headquarters' implementation of the Department of Energy's Hispanic Outreach Initiative. The Program was initiated in 1998 with four interns, was increased to seven students for the 1999 internship program, and twelve for the 2000 program. HIP targets the Society for Hispanic Professional Engineers to obtain most of its summer intern students. Students have come from universities across the mainland United States and Puerto Rico.



...laboratory analysis...

The Hispanic Association of the Department of Energy (HADOE) has endorsed the HIP as an excellent example of the type of program in which the Department should be involved in order to further the goals of the Hispanic Outreach Initiative.

A technical forum is held each summer at the end of the 10-week internship session. The students visit Washington, DC, to attend this forum and give technical presentations, which highlight their internship projects. The presentations, published in a compendium, illustrate the complexity of the student projects. Leadership training, time management and government operations understanding and mentoring aspects are also offered through the Hispanic Internship Program under the Mickey Leland Energy Fellowship.

"The SPR [Strategic Petroleum Reserve] afforded me the opportunity to participate in a valuable internship program. I was able to put into practice material learned in school."

Santiago "Jimmy" Guerra, IV Intern, Summer 1999

Students participating in the HIP have come from the following universities to date:

- Arizona State University (3 students)
- Massachusetts Institute of Technology (MIT)
- · New Mexico State University
- · Purdue University-Calumet
- · San Antonio College
- · University of Puerto Rico-Mayaguez
- · University of SUNY Buffalo
- University of Texas-Austin (2 students)

#### **ASSIGNMENT LOCATIONS**

Washington, DC New Orleans, Louisiana

Austin, Texas

Bryan Mound, Texas Morgantown, West Virginia Casper, Wyoming "This internship has been a great opportunity since, having an engineering background, I was able to broaden my perspective and complement it with knowledge about different types of energy sources, political and international affairs, and policies."

Silvana Palacios Intern, Summer 1998



...leadership training...



... "smart pig" testing...

#### Examples of Types of Summer Internship Projects Under the Hispanic Internship Program

- Research on energy in Ecuador
- Stakeholder involvement in energy
- CENTRA system utilization
- Brine disposal at the Strategic Petroleum Reserve
- · Testing and monitoring operations/SPR
- · Problem research at Bryan Mound
- · Decommissioning a brine pond
- Strategic Petroleum Reserve Field Verification project
- Argentina Prospects Roundtable/Buenos Aires

"A win-win process by which students gain experience and contribute to the organization by accomplishing real-time work."

Julio Maldonado Senior Systems Engineer Strategic Petroleum Reserve New Orleans, LA



...sample collection...

# TRIBAL COLLEGES AND UNIVERSITIES (TCU) INTERNSHIP PROGRAM

The Tribal Colleges and Universities Internship Program (TCU) is a new component of FE's Minority Education Initiative. The goals of the TCU Internship program include: forging new frontiers, advancing excellence in education, and diversifying the high-technology oil, coal, and gas industry workforce by establishing effective partnerships with Tribal Colleges and Universities. The Office of FE supports Executive Order 13021 of October 19, 1996, involving Tribal Colleges and Universities for the purposes of ensuring that they have access to opportunities afforded to other institutions.

The program requires students selected for the ten-week internship to have completed their sophomore year, or have graduate level standing, be pursuing academic degrees in science, math and engineering, and have a minimum grade point average of 2.8 out of 4.0. Placement sites include DOE Headquarters, Field sites, and National Laboratories or industry.

# WHAT ARE TRIBAL COLLEGES AND UNIVERSITIES?

Tribal Colleges were created over the last 30 years in response to the higher education needs of American Indians and they play a vital role in the communities they serve. Most of these Tribal Colleges serve geographically isolated populations that have no other means of accessing education beyond the high school level. Tribal Colleges are unique in that they combine personal attention with cultural relevance to help overcome the barriers in higher education.

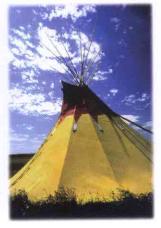
Today, there are 29 tribally chartered colleges, two federally chartered Indian colleges and one Congressionally chartered Indian college in a total of 12 states. The tribally controlled colleges are chartered by one or more tribes and locally managed. The federally chartered colleges are governed by national boards.

#### States where tribally chartered colleges and three federally chartered Indian colleges are located:

Arizona California Kansas Michigan Minnesota Montana Nebraska New Mexico North Dakota South Dakota Washington Wisconsin







#### **Other Web Sites of Interest:**

www.aihec.org - American Indian Higher Education Consortium

www.niea.org - National Indian Education Association

www.aises.org - American Indian Science & Engineering Society

# MINORITY EDUCATION INITIATIVE INFORMATION ROUNDTABLE MEETING (Now Mickey Leland Energy Fellowship)

The Minority Education Initiative Information Roundtable meeting was held on Friday, February 25, 2000, at the St. Regis Hotel in Houston, Texas. The U.S. Department of Energy's Office of Fossil Energy sponsored this meeting to acquaint industry with DOE's Minority Education Initiative (MEI) and to seek industry partners for this minority summer internship program. Approximately forty members of industry, government and educational institutions attended the roundtable meeting to find out how industry and the Federal Government can partner to ensure that the future needs of the fossil fuels industry are met while at the same time benefiting the next generation of students. As a result of the roundtable, nine companies are interested in partnering with DOE on this initiative in 2000; four additional companies plan to partner in 2001.





## TERMS FOR INDUSTRY PARTNERING IN THE MEI

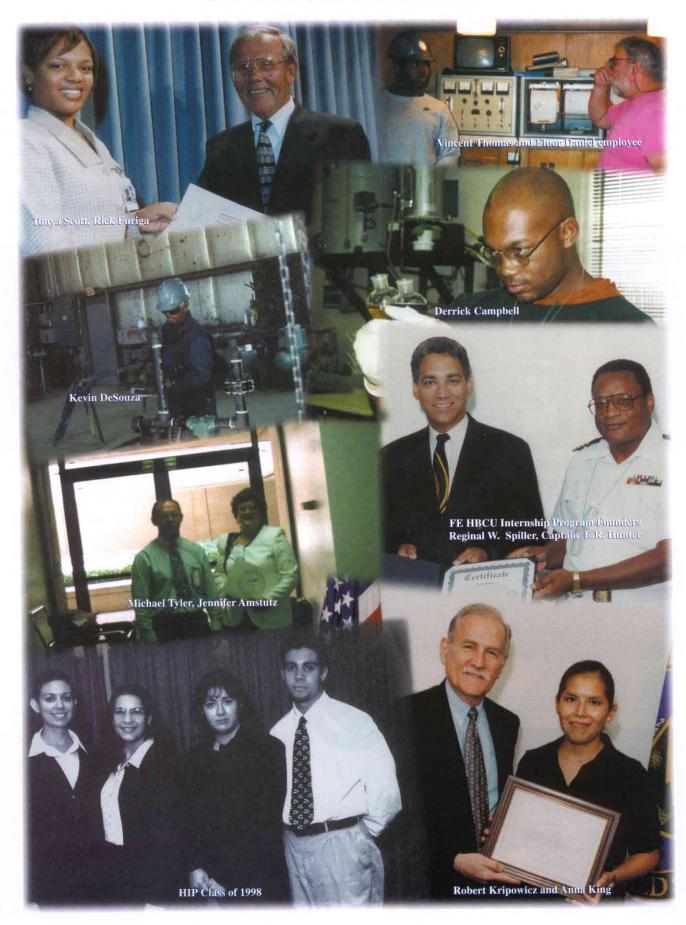
- The MEI is a 10-week summer internship program under which Industry partners provide mentors for the internship duration.
- The Industry partner participates with DOE on a 50/50 cost-share basis in paying the student's stipend.
- Students work on an FE R&D-related project or a project of the Industry partner's choice.
- A student is sent a terms of appointment letter by a DOE representative after he/she is selected for the
  program which details the student's length of appointment and outlines that the student is responsible
  for his/her own housing.







# **SUCCESS STORIES**



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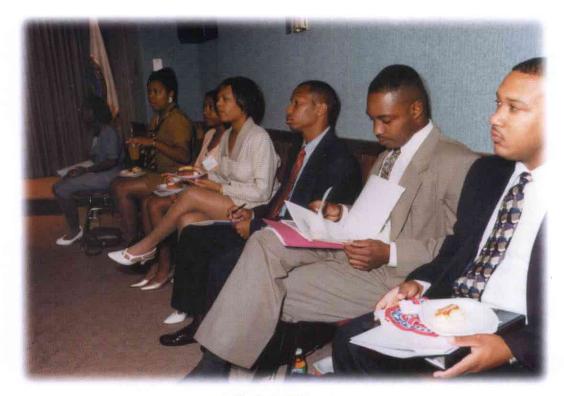


Sponsors, coordinators, and interns HBCU Class of 1996



Mentors and interns Class of 1999

# **SUCCESS STORIES**



Technical Forum Class of 1998



National Energy Technology Laboratory (NETL) interns Class of 1999

